

REMARKS/ARGUMENTS

The Office Action mailed January 31, 2006 has been carefully considered.

Reconsideration in view of the following remarks is respectfully requested.

Claims 30 and 41 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Claim 30 was simply modified to correct an antecedent basis problem. Claim 41 has been amended to include the elements of now-canceled claim 45, and thus finds support in that claim. The text of claims 42-44 is unchanged, but their meaning is changed because they depend from amended claims.

Claims 1-11, 45, 48 and 49 have been canceled, without prejudice or disclaimer of the subject matter contained therein.

With this amendment it is respectfully submitted the claims satisfy the statutory requirements.

The 35 U.S.C. § 112, Second Paragraph Rejection

Claims 30, 43, 48 and 49 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention. Claims 48-49 have been canceled. Claim 30 has been amended to address this rejection. Claim 43 has not been amended, but its corresponding independent claim 41 has been amended such that the terms in Claim 43 now have antecedent

basis. Accordingly, Applicant respectfully submits that these claims are now in condition for allowance.

The 35 U.S.C. § 101 Rejection

Claims 11-50 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. This rejection is respectfully traversed.

M.P.E.P. 2106 (IV) (B) states that "[t]o properly determine whether a claimed invention complies with the statutory invention requirements of 35 U.S.C. 101, Office personnel should classify each claim into one or more statutory or nonstatutory categories." The nonstatutory categories are provided in that section of the M.P.E.P. as being one of the following:

(a) Functional Descriptive Material: Data Structures representing descriptive material per se or computer programs representing computer listings per se.

(b) Nonfunctional Descriptive Material

(c) Natural Phenomena such as Electricity or Magnetism

Applicant maintains that the Patent Office has failed to establish a prima facie case as to why the subject matter in the claims is nonstatutory because the Patent Office has failed to so classify the claims into the appropriate category of nonstatutory subject matter. Nevertheless, Applicant respectfully maintains that the claims do not fall into one of these non-statutory subject matter categories. The Office Action argues that steps in software are intangible embodiments. Applicant is unaware of any standard for statutory subject matter that requires that a claim include a hardware embodiment, as the Office Action appears to imply.

As such, Applicant respectfully requests that this rejection be withdrawn.

The 35 U.S.C. § 102 Rejection

Claims 12-42, 44-47 and 50 were rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by Tang et al.¹. Tang incorporates by reference Gleeson et al.². This rejection is respectfully traversed.

According to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102(a), (b) and (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.³

As to claim 12, contrary to what is stated in the Office Action, Gleeson does not teach or suggest “adding an outgoing port index to a data source-group data structure.” The Office Action equates the source-group data structure of claim 12 with the group forwarding table 250 of Tang (FIG. 2C). However, the source-group data structure is not the same as a forwarding table. The specification and claims of the present invention distinguish between a source-group data structure and a forwarding table. As such, the two cannot be the same thing. Therefore, Gleeson fails to teach a source-group data structure or adding an outgoing port index to any such data structure.

¹ U.S. Patent No. 6,839,348

² U.S. Patent No. 5,959,989

³ Manual of Patent Examining Procedure (MPEP) § 2131. See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Additionally as to claim 12, contrary to what is stated in the Office Action, Gleeson does not teach or suggest that the outgoing port index identifies a port that received the control message. Gleeson only describes that the table 250 “associates each group multicast address with the VLAN destinations of the subscribing entities and the port numbers used to reach those entities.” There is no evidence that the port numbers of this table are in any way tied to the port that received the control message.

As to claim 16, contrary to what is stated in the Office Action, Tang does not teach or suggest “deriving an explicit source lookup key from the control message.” Specifically, the lines of Tang cited by the Office Action (lines 50-67 of Col. 16) describe actions that occur in response to the Multicast message - namely, the content message. This is not the same as a control message such as a join/prune message.

As to claim 18, the arguments above with respect to claims 12 and 16 are equally applicable here. Additionally, contrary to what is stated in the Office Action, Tang does not teach or suggest “determining if the control message establishes shared source distribution trees or explicit source distribution trees.” The Office Action argues that this step is inherent in Tang because “Tang’s system responds differently depending on the source address, whether it is shared source distribution tree or it is an explicit source distribution tree. If it is a shared distribution tree, the system follows the steps described from line 16, col. 15 to line 13, column 16 in Tang. If the message is an explicit one, Tang’s system follows the steps described from line 14, column 16 to line 19, column 19.” However, these two disparate sections of Tang describe two completely different points in time. Line 16, col. 15 to line 13, column 16 describes

what occurs when building the tables, such as on the receipt of a JoinGroup request (the title of this section is even “Building the Multicast Routine (*sic*) Tables”). Line 14, column 16 to line 19, column 19, however, describes what occurs upon receipt of a multicast packet (the title of this section is “distribution of multicast messages sourced from inside a VLAN region). As such, Tang is not deciding between which of these two sections to use in response to a control packet. Tang executes the first section in response to a control packet and the second section in response to a multicast (content) packet. As such, Tang fails to teach or suggest “determining if the control message establishes shared source distribution trees or explicit source distribution trees.”

As to independent claims 25, 29, and 31, these claims contain elements similar to that as described above with respect to claims 12, 16, and 18, and thus Applicant respectfully submits that these claims are allowable for the same reasons as outlined above.

As to independent claims 38, 39, and 40, these claims contain elements similar to that as described above with respect to claims 12, 16, and 18, and thus Applicant respectfully submits that these claims are allowable for the same reasons as outlined above.

As to independent claim 41, this claim has been amended to include the elements of dependent claim 45. Applicant respectfully maintains that, contrary to what is stated in the Office Action, Gleeson does not teach or suggest “adding an outgoing port index to a data source-group data structure.” The Office Action equates the source-group data structure of claim 12 with the group forwarding table 250 of Tang (FIG. 2C). However, the source-group data structure is not the same as a forwarding table. The specification and claims of the present

invention distinguish between a source-group data structure and a forwarding table. As such, the two cannot be the same thing. Therefore, Gleeson fails to teach a source-group data structure or adding an outgoing port index to any such data structure.

Additionally as to claim 41 as amended, contrary to what is stated in the Office Action, Gleeson does not teach or suggest that the outgoing port index identifies a port that received the control message. Gleeson only describes that the table 250 “associates each group multicast address with the VLAN destinations of the subscribing entities and the port numbers used to reach those entities.” There is no evidence that the port numbers of this table are in any way tied to the port that received the control message.

Furthermore, the Office Action, by rejecting claim 41 over Tang while rejecting claim 45 over Gleeson, inherently is arguing that the two teachings should be combined to teach the elements of both claims together. While Applicant recognizes that Gleeson was incorporated by reference into Tang, Applicant maintains that it does not follow from this incorporation by reference that the elements of Gleeson can be utilized simultaneously with the elements of Tang in the same invention. In other words, if a first reference teaches A and a second reference teaches B, the combined reference does not necessarily teach A and B, but rather more likely teaches A or B. This is particularly the case here because Gleeson and Tang describe two different ways to accomplish the same goal, while nothing in either reference suggests that it would be desirable to build an invention that would use more than one way to accomplish that goal.

As to independent claim 46, contrary to what is stated in the Office Action, Tang does not teach or suggest “deriving an explicit source lookup key from the control message.” Specifically, the lines of Tang cited by the Office Action (lines 27-49 of Col. 16) describe actions that occur in response to the Multicast message - namely, the content message. This is not the same as a control message such as a join/prune message.

As to dependent claims 13-15, 17, 19-24, 26-28, 30, 32-37, 42-44, and 47-50, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Conclusion

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.


Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Respectfully submitted,

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Dated: 4/25/06



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